

REMARKS

Claims 1-7 and 11-25 are pending in the application.

Claims 2 and 12 are amended to recite “wherein the nozzle contains air before and during the sucking step”.

New Claims 22-25 are added. Support can be found, for example, in Figures 1A-1F. No new matter is added.

Entry of the Amendment along with reconsideration and review of the claims on the merits are respectfully requested.

Formal Matters

Applicants appreciate that the Examiner has acknowledged Applicants’ Information Disclosure Statement filed on February 17, 2005.

Applicants also appreciate that the Examiner has also withdrawn the finality of the previous Office Action based on Applicants’ request for continued examination under 37 C.F.R. §1.114, filed on June 13, 2005.

Claim Rejections - 35 U.S.C. § 112

Claims 2 and 12 are rejected under 35 U.S.C. §112, second paragraph, as assertedly being incomplete for omitting essential steps.

The Examiner states that the omitted step is an introduction or suction of air into the operation. The Examiner believe that since the claim does not provide proper antecedent basis

that there is air in the liquid, or air in the nozzle, it appears that a step collecting air has been omitted.

Applicants respond as follows.

For clarification, Claims 2 and 12 are amended to recite “wherein the nozzle contains air before and during the sucking step”, thereby clarifying that air is contained in the nozzle.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph.

Claim Rejections - 35 U.S.C. § 103

A. Claims 1, 3-5, 7, 11, 13-15 and 17-21 are rejected under 35 U.S.C. §103(a) as assertedly obvious over JP 62-184357 in view of Knobel (U.S. Patent No. 5,482,863), for the reasons given in the Office Action.

The Examiner recognizes that the JP ‘357 reference fails to disclose or suggest the step where the discharge position is positioned at a horizontally different position from the sucking position.

The Examiner cites Knobel as teaching that it is desirable to discharge a liquid into a container at two different horizontal points thereby creating two vortex flows, to enable the solid phase to be suspended exclusively by injection of reagent, thus avoiding the need for a subsequent shaking operation.

B. Claims 2 and 12 are rejected under 35 U.S.C. §103(a) as assertedly being unpatentable over JP 62-184357 in view of Knobel as applied, and further in view of JP 64-

27626.

The Examiner recognizes that JP 62-184357 in view of Knobel fails to disclose or teach the step of discharging air.

The Examiner cites JP '626 as teaching that air may be sucked into a discharge nozzle and discharged with the sample into the container causing air bubbles to further mix the fluid component.

C. Claims 6 and 16 are rejected under 35 U.S.C. §103(a) as assertedly being unpatentable over JP 62-184357 in view of Knobel as applied above, and further in view of Makino et al (U.S. Patent No. 5,555,767).

The Examiner recognizes that JP 62-184357 in view of Knobel fails to disclose using a container with an inclined wall of the structural type recited in the claims.

The Examiner cites Makino as showing a pipette used to mix liquid in a container which may have vertical walls or alternately with walls with an incline.

Applicants respond as follows.

Applicants traverse the obviousness rejections by focusing on independent Claims 1 and 11.

A skilled artisan would not be motivated to combine the teachings of JP '357 with the teachings of Knobel to achieve the present invention. JP '357 is directed to a method for agitating liquid A and liquid B using a pipette and automatic control. On the other hand, Knobel is directed to an analytical device incorporating a system for suspending particles in liquid reagent (see Abstract). Knobel teaches the discharge of part of only one liquid at one horizontal

position and the discharge of the remaining part of the same liquid at a different horizontal position (see column 3, lines 19-36). However, a skilled artisan would not be motivated to combine the teachings of JP '357 with the teachings of Knobel when JP '357 has a different purpose from that of Knobel and when JP '357 achieves that different purpose by different elements and different means. That is, JP '357 mixes two separate liquids A+B. In contrast, Knobel only suspends particles in one liquid reagent. Further, JP '357 moves a pipette up and down. In contrast, Knobel only moves a pipette horizontally. Thus, a skilled artisan would not be motivated to combine these references.

Thus, with regard to JP '357, it only discloses the method of mixing two separate liquids. Although it might be possible to mix two separate liquids by the method of JP '357, it is obvious from the content of the Rule 132 Declaration previously filed on December 24, 2003, that it is difficult to agitate the liquid containing a large amount of solid phase, such as whole blood, by the method of JP '357.

Furthermore, assuming *arguendo* that the references are properly combinable, the references still fail to achieve the present invention. For example, in Claim 1, Applicants recite a step where the sucked liquid is discharged directly into the liquid remaining in the container. In comparison, JP '357 specifically teaches that the liquid in the pipette is discharged above the liquid surface of the mixed liquid existing in the vessel (see English translation of the Abstract). Furthermore, JP '357 teaches away from discharging liquid directly into the liquid remaining in the container by teaching that "[t]he liquid in the container becomes sufficiently agitated physically as a result of the repetitions, via an interface provided by the liquid surface of the

liquid within said container, of pipet descension & suction and pipet ascension & extrusion actions.” (English translation at page 4, paragraph F).

Knobel fails to make up for JP ‘357’s deficiencies. Knobel also teaches discharge of liquid into a container at positions above the level of existing liquid in the container (see Figs. 2-5). Further, Knobel relates to a method of suspending solid phase. However, according to Figs. 2-5, the amount of the liquid is much larger than that of the solid phase, and under such conditions, it is natural that the solid phase can be suspended. In Knobel, a nozzle moves horizontally only for chipping off the solid phase stuck to the wall of the container by discharging the liquid directly to the solid phase.

Regarding Claim 11, Applicants claim a step where the sucked liquid is discharged directly toward a container’s inclination. In comparison, JP ‘357 fails to disclose a step where the sucked liquid is discharged directly towards a container’s inclination. Knobel fails to make up for JP ‘357’s deficiencies as Knobel also fails to disclose a step where the sucked liquid is discharged directly towards a container’s inclination (see Figs. 2-5).

Thus, the combination of JP ‘357 and Knobel fail to render obvious the present invention.

Further, the present invention provides for unexpectedly superior/excellent results of agitation, as supported by the content of the Declaration under 37 C.F.R. § 1.132 filed on December 24, 2003.

According to the present invention, as shown in the previously filed Declaration, it is possible to agitate the liquid containing solid phase, such as whole blood. Whole blood contains 30-60% of solid phase, and the present invention is excellent, because even the liquid

containing a large amount of solid phase can be strongly agitated by discharging a small amount of the stirred liquid according to the present invention (according to the condition D of the Declaration, the stirred amount was 30 μ L while the total amount was 100 μ L. The stirred liquid may contain the solid phase.).

It cannot be expected by one skilled in the art to agitate a liquid containing a large amount of solid phase, such as whole blood, from the description of Knobel that solid phase stuck to the wall of the container is suspended by discharging the liquid sucked outside, directly to the solid phase, and such a purpose is not intended in Knobel.

Accordingly, it is not obvious for a person skilled in the art to combine Knobel and JP '357, because the purposes and the methods of Knobel and JP '357 are different from each other. Furthermore, one skilled in the art would not have expected the unexpectedly excellent effect of the present invention from a combination of Knobel and JP '357. The present invention is excellent, since the present invention achieves the agitating effect which is at the same level as falling mixture (which cannot be achieved by using small equipment), by employing an easy method.

Further, regarding Claim 11, the method of Claim 11 is a very effective method, and neither Knobel nor JP '357 discloses a step where the sucked liquid is discharged directly towards a container's inclination.

Applicants rely on the same reasons above for traversing the obviousness rejections of dependent claims 2-7 and 12-21.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 09/817,251

Atty. Docket No. Q63803

rejections under 35 U.S.C. § 103(a).

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

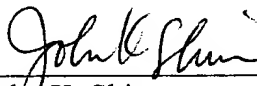
Respectfully submitted,

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER



John K. Shin
Registration No. 48,409

Date: September 23, 2005